

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-22 are currently pending in the present application, Claims 1-15 having been amended by the present amendment and Claims 16-22 having been added. Support for the amendments to Claims 1, 2, 10 and 11 is found in Fig. 3, for example, and therefore no new matter is added. Other amendments to Claims 1-15 correct minor informalities without adding new matter. Support for new Claims 16-20 is found in the original Claims.¹

In the outstanding Office Action, Claims 1-15 were rejected under 35 U.S.C. § 103(a) as unpatentable over Mori (U.S. Patent No. 6,330,446) in view of Amirijoo (U.S. Patent No. 6,119,012).

Applicant thanks the Examiners for the courtesy of an interview extended to Applicants' representatives on April 25, 2005. During the interview, differences between the present invention and the applied art, and the rejections noted in the outstanding Office Action were discussed. The Examiners agreed that the amended Claim 1 distinguished over the art of record, and the Examiners advised Applicant to submit arguments regarding Claim 3 in writing for formal consideration. Arguments presented during the interview are reiterated below.

Claim 1 is amended to recite "...determination means for determining a period of location registration of said mobile communication terminal according to said number of consecutive stays of said mobile communication terminal stored in said first storage means...." Indeed, neither Mori nor Amirijoo describe or suggest this element of amended Claim 1.

¹ Support for the "and/or" in new Claims 16 and 20 can be found in original Claims 1, 3, and 5.

Mori describes assigning a registration interval to a mobile terminal on the basis of velocity.² The velocity of the mobile device does not describe or suggest the claimed “number of consecutive stays of said mobile communication terminal.” Velocity is a measure of distance moved over time, while number of consecutive stays relates to how long a mobile terminal stays in a same location registration area.³

In addition, Mori does not describe or suggest the claimed “storage means for storing information concerning a number of consecutive stays of said mobile communication terminal in a location.” Mori only describes storing a position of a mobile terminal.⁴

Finally, because Mori does not describe or suggest the claimed “determination means,” Mori cannot describe or suggest the claimed “registration means for transmitting said period of location registration determined by said determination means.”

Furthermore, Amirijoo does not cure the above-noted deficiencies of Mori. Amirijoo describes updating information based on a ratio of the total number mobile location updates to the total number of failed pagings.⁵

Thus, Amirijoo does not describe or suggest “...determination means for determining a period of location registration of said mobile communication terminal according to said number of consecutive stays of said mobile communication terminal stored in said first storage means....”

In view of the above-noted distinctions, Applicants respectfully submit that amended Claim 1 (and dependent Claims 2 and 7) patentably distinguishes over Mori and Amirijoo, taken alone or in combination. Applicants further submit that Claims 10 and 11 patentably distinguish over Mori and Amirijoo for at least the reasons given for Claim 1.

²Mori, col. 7, lines 19-21.

³ Specification, page 9, lines 3-6.

⁴ Mori, col. 7, lines 13-14.

⁵ Amirijoo, col. 2, lines 65-67.

With respect to the rejection of Claims 3, 5, 12, and 14, Applicants respectfully traverse the outstanding ground of rejection because the outstanding Office Action fails to provide a *prima facie* case of obviousness by asserting prior art that, no matter how the prior art references are combined, does not teach every limitation of independent Claims 3, 5, 12, and 14.

To establish a *prima facie* case of obviousness, M.P.E.P. §2143 requires that three criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the references teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim elements.

Claim 3 recites "...storage means for storing information concerning a frequency of arrival of incoming calls to said mobile communication device...." Applicants agree with the Office Action that Mori does not describe or suggest determining a period of location registration based on a frequency of arrival of incoming calls.⁶ However, Amirijoo does not cure the deficiency of Mori.

The Office Action relies on Amirijoo col. 3, lines 4-15 and Figs. 3-5 to disclose the above-noted element of Claim 3. However, col. 3, lines 4-15 only describes ascertaining whether a ratio falls within a range of a threshold. The ratio described by Amirijoo is not a frequency of arrival of incoming calls to a mobile communications device. Amirijoo describes finding a ratio between the total number of mobile location updates to the total number of failed pagings.⁷

⁶ Office Action, page 4.

⁷ Amirijoo, col. 2, lines 65-67.

Furthermore, Figs. 3-5 of Amirijoo do not describe “storing information concerning a frequency of arrival of incoming calls to said mobile communications device.” Figs. 3-5 only describe methods that use the above-noted ratio and threshold.

In addition, Claim 3 recites “...determining a period of location registration of said mobile communication terminal according to said information concerning said frequency of arrival of incoming calls to said mobile communication terminal stored in said storage means...” Mori and Amirijoo do not describe or suggest this element of Claim 3.

As noted above, Mori only describes assigning a registration interval based on the velocity of the mobile terminal. Amirijoo only describes a dynamic release of data on the basis of whether the ratio of the number of mobile location updates to the total number of failed pagings falls within a particular range of the threshold values.

Furthermore, Mori, when modified by Amirijoo, will not describe or suggest determining a period of location registration based on a stored frequency of arrival of incoming calls. Mori, when modified by Amirijoo, would still determine the period of location registration based on velocity. Mori and Amirijoo do not include a suggestion or motivation to modify how Mori determines a period of location registration.

In view of the above-noted distinctions, Applicants respectfully submit that Claims 3 (and dependent Claims 4 and 8) patentably distinguish over Mori and Amirijoo, alone or in combination. In addition, Applicants respectfully submit that Claims 5, 6, 9, and 12-15 patentably distinguish over Mori and Amirijoo for at least the reasons given for Claim 3.

Applicants respectfully submit that new Claims 16-20 patentably distinguish over Mori and Amirijoo, alone or in combination, for at least the reasons given for Claims 1 and 3.

Finally, it is respectfully requested that the reference submitted in the IDS filed November 12, 2004 be considered on the record, and that the Examiner send the undersigned an initialed PTO-1449 form to that effect.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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